
पोटैशियम क्लोराइड (म्यूरिएट ऑफ
पोटैश) उर्वरक ग्रेड — विशिष्टि

(दूसरा पुनरीक्षण)

Potassium Chloride (Muriate of
Potash), Fertilizer Grade —
Specification

(Second Revision)

ICS 65.080

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Soil Quality and Fertilizers Sectional Committee had been approved by the Food and Agriculture Division Council.

This standard was originally published in 1964. In its first revision in 1980, the potash content was raised from 58.0 to 60.0 percent. Further, the details of test methods were deleted from the standard and reference was made to already published standards on methods of sampling and test for fertilizers.

The second revision of this standard has been undertaken to align the requirements of Potassium Chloride, Fertilizer Grade specified in this standard with the *Fertilizer (Control) Order*, 1985. For particle size, the use of IS sieves conforming to IS 460 is prescribed. Where IS sieves are not available, other standard sieves as judged from aperture size may be used.

In the formulation of this standard, due consideration has been given to the provisions of the *Fertilizer (Control) Order*, 1985, the *Essential Commodities Act*, 1955 and the *Legal Metrology (Packaged Commodities) Rules*, 2011. However, this standard is subject to the restrictions imposed under them, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

POTASSIUM CHLORIDE (MURIATE OF POTASH), FERTILIZER GRADE — SPECIFICATION

(*Second Revision*)

1 SCOPE

1.1 This standard prescribes the requirements and methods of sampling and test for potassium chloride (muriate of potash), fertilizer grade.

2 REFERENCES

The following standards contain provisions, which through reference in this text constitute provisions of this standard. At the time of publication the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

<i>IS No.</i>	<i>Title</i>
460	Test sieves:
(Part 1): 1985	Wire cloth test sieves
(Part 2): 1985	Perforated plate test sieves
6092	Method of sampling and test for fertilizers:
(Part 1): 1985	Sampling
(Part 4): 1985	Determination of potassium
(Part 5): 1985	Determination of secondary elements and micronutrients
(Part 6): 1985	Determination of moisture and impurities
7406 (Part 1): 1984	Specification for jute bags for packing fertilizers: Part 1 Laminated bags manufactured from 407g/m ² : 85 × 39 tarpaulin fabric
9755:2003	High density polyethylene (HDPE)/polypropylene (PP) woven sacks for packing fertilizers — Specification

3 GRADES

3.1 There shall be two grades of potassium chloride (muriate of potash), fertilizer grade:

- a) *Grade I* — Powdered; and
- b) *Grade II* — Granular.

4 REQUIREMENTS**4.1 Description**

The material shall be crystalline or granular, white or

light grey or pinkish in colour and free from visible contamination with clay and grit.

4.2 Particle Size

The particle size of the material for:

4.2.1 *Potassium Chloride (muriate of potash), powdered* — Minimum 65 percent of the material shall pass through 1.7 mm IS sieve and be retained on 0.25 mm IS sieve. A tolerance of 3 units of particle size shall be permissible.

4.2.2 *Potassium Chloride (muriate of potash), granular* — Minimum 90 percent of the material shall pass through 3.35 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 percent shall be below 1 mm sieve. A tolerance of 3 units of particle size shall be permissible.

4.3 The material shall also comply with the requirements given in Table 1. When tested in accordance with the methods given in col 5 of Table 1.

5 PACKAGING AND MARKING**5.1 Packing**

The material shall be packed in laminated jute bags conforming to IS 7406 (Part 1) or High Density Polyethylene (HDPE)/Polypropylene (PP) woven sacks conforming to IS 9755 or in such other containers as agreed to between the purchaser and the supplier.

5.2 Marking

The containers shall be securely closed and marked with the following:

- a) Name of manufacturer/Pool handling agency/Importer (where a manufacturer is also pool handling agency, word 'P' and as the case may be, if an importer the word 'I' shall be written against the name of such manufacturer, if the bag contains imported fertilizer);
- b) Trade-mark and/or Brand name, if any;
- c) Name of the fertilizer (in case of imported fertilizer, the word 'Imported' shall be superscribed);
- d) Percent nutrient as K₂O to be denoted by the letter 'K';

Table 1 Requirements for Potassium Chloride (Muriate of Potash), Fertilizer Grade
(Clause 4.3)

Sl No.	Characteristic	Requirement for KCl		Methods of Test, Ref to Clause
		Powdered	Granular	
(1)	(2)	(3)	(4)	(5)
i)	Moisture, percent by weight, <i>Max</i> ¹⁾	0.5	0.5	4 of IS 6092 (Part 6)
ii)	Water soluble potash content (as K ₂ O), percent by weight, <i>Min</i> ²⁾	60.0	60.0	5 of IS 6092 (Part 4)
iii)	Sodium (as NaCl), percent by weight (on dry basis), <i>Max</i>	3.5	3.5	5.8 of IS 6092 (Part 6)
iv)	Magnesium (as MgCl ₂) percent by weight, <i>Max</i>	—	1.0	5.2 of IS 6092 (Part 5)

¹⁾ A tolerance of 0.3 units of moisture content shall be permissible.

²⁾ A tolerance of 0.2 units of nutrient shall be permissible.

- e) Gross and net quantity in kilogram;
- f) Maximum retail price.....inclusive of all taxes;
- g) Month and year of manufacture/import (in case of imported fertilizer); and
- h) Any other information required under the *Fertilizer (Control) Order, 1985* and the *Legal Metrology (Packaged Commodities) Rules, 2011*.

5.2.1 BIS Certification Marking

The bags may also be marked with the BIS Certification Mark.

The use of the Standard Mark is governed by the

provisions of *Bureau of Indian Standard Act, 2016* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

6 SAMPLING

6.1 Representative test samples of the material shall be drawn as prescribed in IS 6092 (Part 1).

6.2 Criteria for Conformity

For declaring the conformity of the lot to the requirements of this standard, the test results on the composite sample shall satisfy all the requirements specified in 4.

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Amendments Issued Since Publication

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